"A disease known is half cured."

—Thomas Fuller, Gnomologia: 75 (1732).

## Grand Rounds in Environmental Medicine

With this issue, Environmental Health Perspectives initiates a new series: Grand Rounds in Environmental Medicine. In this new series, we will present cases drawn from real life that represent problems commonly encountered in environmental medicine. Some of the cases will be routine; others will have a twist, a twist that is not too unordinary, but rather is illustrative of some of the variations that might occur with a particular environmental illness. All cases will be discussed by a recognized expert in the field who will provide a concise but state-of-the-art appraisal of the scientific and medical issues surrounding the evaluation and management of the case.

The design of Grand Rounds in Environmental Medicine begins with a patient; traces the steps of an expert who will attempt to harness all of the best research in this area, coupled with his or her own experience and intuition, to formulate an approach to the diagnosis and management of the problem; and ends with the patient. Our goal is to provide real-life examples that will resonate with the experiences of many of our readers and demonstrate approaches that could be taken in any physician's practice.

The pages of this journal are already crowded with reports of important scientific investigations that cover the gamut of environmental health research, but many physicians are looking for basic knowledge and techniques for evaluating and managing patients with suspected environmental disorders. Numerous studies have documented the continuing absence of curriculum development in the area of environmental medicine in our medical schools (1). Physicians who specialize in this area remain few in number (less than 1,000 in the United States). Primary care physicians have all along been the care providers who are most likely to see environmental disorders (2), and current trends in health care delivery are, in general, making it difficult for patients to be referred to specialists.

Moreover, even among physicians who have the motivation to educate themselves in environmental medicine, it must be remembered that the practice of medicine combines both science and art. Physicians are indoctrinated in this axiom time and time again during medical school and years of residency training. The art of medicine refers to the ability to extract from a mass of often contradictory symptoms, physical signs, and laboratory data those items that are of crucial significance in determining diagnoses and constructing a plan for managing a particular patient. It is a combination of medical knowledge, intuition, and judgment that reflects the fact that despite the rapid advances that have been made in medical research and, indeed, clinical epidemiology and decision-making science, consensus usually exists for only the most general aspects of any given patient's presentation.

This is perhaps especially true for patients with environmental diseases, for several reasons. First, the very orientation of environmental medicine is to focus primarily on identifying the root causes of disease. This reflects the importance of prevention of hazardous exposures. Research on the contribution of environmental factors (other than smoking and, perhaps, diet) to the etiology of most chronic diseases still remains at a relatively early stage, and it is difficult in the clinical setting of individual patients to assess the potential

environmental-relatedness of such common diseases as hypertension, strokes, heart attacks, cancer, and dementia.

Second, the prevention and management of cases of environmental illness often require going beyond the prescription of the correct drug or the performance of an office or hospital-based procedure. It may involve communicating with federal, state, or local authorities;



dealing with employers, unions, attorneys, and other third parties; and making adjustments in the home, community, or work environment. These are topics that are rarely broached during professional training.

Some of our readers will take exception to the choices made by our Grand Rounds experts, and some will be critical of the "clinicalization" of problems that are ideally solved through better prevention and public health practice. But the very first step in dealing with these types of problems is often the most difficult: their recognition. That will be half the battle in many cases of environmental disease. And, as Thomas Fuller noted some 250 years ago, once the disease is known, it is, indeed, half cured.

Note: Most of the Grand Rounds in Environmental Medicine offered in coming issues of Environmental Health Perspectives will be drawn from the case records of selected major academic programs in environmental medicine and occupational medicine in North America. However, we solicit cases, provided they are adaptable to this format and pass peer review, from our general readership and their institutions. Interested readers will find a new section in the Instructions for Authors that gives details on how to prepare submissions for publication in this section.

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## REFERENCES

- Institute of Medicine. Environmental Medicine—Integrating a Missing Element into Medical Education (Pope AM, Rall DP, eds). Washington, DC:National Academy Press. 1995.
- Institute of Medicine. Role of the Primary Care Physician in Occupational and Environmental Medicine. Washington, DC:National Academy Press, 1988.

The editors and staff are pleased to welcome Dr. Hu in his new role as Medical Editor of Environmental Health Perspectives.